



## A CUP OF HEALTH WITH CDC

### *A Shot in the Dark*

*Within-Season Estimate of the Effectiveness of Trivalent Inactivated Influenza Vaccine — Marshfield, Wisconsin, 2007–08 Influenza Season*

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*[Announcer] This podcast is presented by the Centers for Disease Control and Prevention. CDC — safer, healthier people.*

[Dr. Gaynes] Welcome to *A Cup of Health with CDC*, a weekly feature of the MMWR, the Morbidity and Mortality Weekly Report. I'm your host, Dr. Robert Gaynes.

You got your flu vaccine, and now you have the flu. So who is to blame? Your doctor? The shot? Actually, that pesky bug that keeps changing its stripes. Unlike other vaccines, the composition of the influenza vaccination changes every year, based on researchers' best guess as to the flu strains most likely to be in circulation the following season. Sometimes, an unexpected strain makes its way past the vaccine and causes an outbreak.

Dr. David Shay is a researcher with CDC's National Center for Immunization and Respiratory Diseases. He's joining us today to discuss the influenza vaccine. Welcome to the show, David.

[Dr. Shay] Thank you; my pleasure to be here.

[Dr. Gaynes] David, generally, how effective is the influenza vaccine each year?

[Dr. Shay] Well, a quick answer to that question is, it actually depends, quite a bit. It depends primarily on the match between the strains of influenza that are covered by the vaccine and those that happen to be in circulation when influenza season actually hits. It also depends some on the age of the patient. We know that influenza vaccines, in general, work better for healthy, younger adults than they do for the very young and the very old.

[Dr. Gaynes] How is the composition of the vaccine determined, and who makes the final call?

[Dr. Shay] Laboratory researchers around the world characterize thousands of influenza viruses each year. And based on those characterizations, they try to predict which strains will be in circulation the following season. So, to give time for the manufacturer of vaccine, they have to make that call seven to nine months in advance. And it's the Food and Drug Administration that makes that final call.

[Dr. Gaynes] Can anything be done to the vaccine during the flu season?

[Dr. Shay] No. Because of the timeline required for production of vaccine, nothing can be done to alter the vaccine composition, actually, during the flu season itself.

[Dr. Gaynes] Even in seasons where the vaccine is not a good match for circulating flu strains, are there still advantages to getting vaccinated?

[Dr. Shay] Yes, that's a very good question. We do have evidence that even in years where the match between the circulating vaccine strains is not perfect, that there's still protection against more severe outcomes, such as hospitalizations.

[Dr. Gaynes] Where can listeners get more information about the influenza vaccine?

[Dr. Shay] A good place to start is CDC's website at [www.cdc.gov/flu](http://www.cdc.gov/flu).

[Dr. Gaynes] David, thanks for sharing this information with our listeners today.

[Dr. Shay] It's been my pleasure.

[Dr. Gaynes] That's it for this week's show. Be sure and join us again next week. Until then, be well. This is Dr. Robert Gaynes for *A Cup of Health with CDC*.

[Announcer] For the most accurate health information, visit [www.cdc.gov](http://www.cdc.gov) or call 1-800-CDC-INFO, 24/7.